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Ethnohistoric Accounts as Valuable Resources for Deciphering Commensal Relationships of Pre-Contact Caribbean Agouti (Dasyproctidae: *Dasyprocta*)

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Abstract. The Neotropical rodent agouti (*Dasyprocta* sp.), arguably one of the most prominent pre-Contact introduced commensals of the Lesser Antilles, has long been proposed as having been managed and maintained in captivity by Indigenous Caribbean groups. These claims, however, remain so far unsubstantiated. Ethnohistoric texts may serve as valuable resources for establishing the commensal relationships agouti shared with Indigenous Caribbean groups. Here, I synthesize the evidence from seventeenth century French ethnohistoric texts to address the question of pre-Contact agouti management and captivity and concretize some of the many other commensal relationships linking agouti to Indigenous groups. Ethnohistoric texts reveal that, in addition to having been managed through garden hunting, agoutis occurred as tame, in close proximity to settlements, although they do not appear to have been maintained in captivity. Agoutis also occurred as detached from human settlements, maintaining minimal interaction with human groups. Ethnohistoric texts repeatedly associate agoutis and agouti skeletal elements with ritual practices, suggesting ceremonial/cosmological value. This study shows that ethnohistoric texts hold critical potential for substantiating pre-Contact commensal relationships and, by extension, may offer insight into Indigenous identities and lifeways, and island ecology.

Keywords: animal management, Lesser Antilles, West Indies, social zooarchaeology, ethnohistory

Introduction

The agouti (*Dasyprocta* sp.) was introduced to the Caribbean islands from South America during the Early Ceramic Age (500 BC–AD 400/600), by AD 35 (Rabinow and Giovas 2021). Behavioral (National Research Council 1991:200, 203–204) and contemporary evidence (e.g., Brown-Uddenberg et al. 2004; Govoni and Fielding 2001) suggests these rodents have been managed and maintained in captivity by Indigenous Caribbean groups (Newsom and Wing 2004; Wing 1993, 1996, 2008, 2012). However, no archaeological evidence for agouti management or captivity has yet been recorded. Although isotopic and morphometric data offer great potential for the study of pre-Contact commensal relationships (e.g., LeFebvre et al. 2019a, 2019b), such analyses have not yet been completed for agouti. With evidence scarce, ambiguities persist, necessitating the incorporation of alternative sources.

Here, I present evidence from nine French colonial texts discussing agouti in Indigenous Caribbean contexts. I begin with a review of agouti taxonomy, ecology, and pre-Contact introductions to the Caribbean and summarize the current understanding of pre-Contact agouti commensal relationships based on behavioral and archaeological data. I acknowledge the limitations of ethnohistoric texts before discussing their portrayal of agouti commensal relationships. I contextualize the discussion using South American ontologies, introduced to the Caribbean with the arrival of Arawakan speakers (Norton 2015) over 2500 years ago. Evidence high-

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lights the potential of ethnohistoric texts for substantiating pre-Contact commensal relationships and for orienting future archaeological inquiry. Establishing agouti's standing within pre-Contact groups informs Indigenous identities and lifeways, and contributes to characterizing the impact of pre-Contact translocated fauna on island ecology.

Agouti Background

Agouti Taxonomy and Ecology

Agoutis (family Dasyproctidae) are medium-sized Neotropical rodents (Figure 1). The genus, *Dasyprocta*, is divided into 11 species and 29 subspecies (Wilson and Reeder 2005), although the entire taxonomy is in need of thorough revision (Emmons and Feer 1997; Patton and Emmons 2015). *Dasyprocta* spp. home ranges extend across most of Central and South America and Trinidad (Emmons and Feer 1997), though their native status for Tobago is unclear. Agoutis inhabit Neotropical forests but also fare well in disturbed habitats, such as secondary growth, plantations, and gardens (Emmons and Feer 1997). They are scatter-hoarders, digging caches for the fruits and seeds on which they primarily feed (Smythe 1978). In the wild, agoutis are shy and may demonstrate aggressive behavior in times of food scarcity or territorial overlap (Aliaga–Rossel et al. 2008; Smythe 1978). However, they have been shown to adapt extremely well to captivity (National Research Council 1991:200, 203–204) and have generated extensive interest for intensive captive rearing (Govoni and Fielding 2001; Jones et al. 2019; Ranjeeta Lall et al. 2020).

Caribbean Introductions

Agoutis were first introduced to the Caribbean by South American Arawakan speakers during the Early Ceramic Age, as part of these groups' efforts to supply the islands with commensals—species living in close association with humans. While introduced commensals are often considered for their subsistence value, their introduction to the islands is likely to have held

Figure 1. Agouti (*Dasyprocta* sp.) by Brian Gratwicke, 'Agouti', 2012. CC BY 2.0.

additional significance for the Arawakan groups with which they traveled (Giovas 2019). Arawakan ontologies and perspectives regarding human-animal relationships emphasize:

1. the absence of the nature/culture divide, with non-human animals sometimes integrated as children within human households, valued and cared for accordingly;
2. the value of beings as determined on a basis of ongoing social interactions rather than taxonomically assigned. Commensal relationships may have fluctuated from individual to individual rather than from species to species, as is typically the case in Western epistemologies; however, once integrated or tamed, animals were proscribed from being consumed, in some cases perhaps even accorded divine value;
3. the comprehensive modification of landscapes as opposed to focus on the domestication of individual species, although many animals were tamed (Cormier 2003; Erickson 2006, 2008; Heckenberger et al. 2003; Norton 2015; Viveiros de Castro 1998, 2002, 2005).

Agoutis were present in the Caribbean by AD 35, although translocations are shown to have substantially accelerated after AD 400–600 (Rabinow and Giovas 2021). These introductions are likely to have impacted island ecologies, altering plant species distribution and abundance and affecting resource availability for native fauna (Taylor et al. 2014; Terborgh et al. 2001). Agouti's pre-Contact Caribbean distribution extends across the Lesser Antilles, Aruba, and Curaçao in the Southern Caribbean (Rabinow and Giovas 2021; see Figure 2). Abundances vary from island to island and do not offer convincing evidence for geographic patterning (Rabinow and Giovas 2021). The species introduced pre-Contact has tentatively been identified as *Dasyprocta leporina* (see Rabinow and Giovas 2021 for discussion regarding candidate species for Caribbean introductions), although the problematic taxonomy and interspecific morphological similarity recommends a thorough re-investigation. The agouti's colonial Caribbean distribution remains unconfirmed, likely impacted by European landscape change (Fitzpatrick and Keegan 2007) and introductions of *Dasyprocta* spp. as game meat for slaves (National Research Council 1991:200). Overall, agouti appears to have maintained a firm presence in the islands during the colonial period (Labat 1722:391).

Pre-Contact Caribbean Commensal Relationships

The agouti's docile and synanthropic nature, partiality for disturbed habitats (Emmons and Feer 1997), and modern-day suitability for husbanding and providing companionship (e.g., Brown-Uddenberg et al. 2004; Govoni and Fielding 2001) suggests them as prime candidates for pre-Contact management and/or captivity (Newsom and Wing 2004; Wing 1993), including such casual opportunistic management strategies as garden hunting (Linares 1976, as suggested by Crosby 2001; Wing 1996). Agoutis are even proposed as having reached a state of incipient domestication (Wing 1993, 2008, 2012). The agouti's widespread presence across the Lesser Antilles (Rabinow and Giovas 2021) suggests common interaction with human groups, since it would have been unlikely to cross the waterways between the islands without aid. Today, agoutis no longer occur on many of the islands holding pre-Contact records (see Rabinow and Giovas 2021:Table S1 for a complete review), which may be linked to the collapse of Indigenous introduction/management systems during the colonial period (Giovas et al. 2016).

Agoutis often appear as disarticulated remains in middens in relatively low abun-

dances (e.g., Giovas et al. 2012) and lack any cultural modification beyond that typically associated with consumption (i.e., burning and/or butchery marks) (e.g., Delsol and Grouard 2016). Worked agouti bone has been recovered from Indian Creek, Antigua (Giovas 2019); Anse à la Gourde, Grande-Terre (Delpuech et al. 2000:30); Á l'Escalier, La Désirade (de Waal 2006:377); Grand Bay, Carriacou (Rabinow and Giovas 2021); and on other unspecified islands (Grouard 2007). Possible uses for the worked agouti bone include tubes and beads for adornment (Giovas 2019). A single agouti burial at Sugar Factory Pier on Saint Kitts (approximately AD 700–1000) (Wing 1993: 247) shows that, in some cases, at least, agoutis transcended a purely dietary status. Agouti zoomorphs, found at Baie aux Prunes (Saint Martin) (Bonnissent 2008:585), Lopinot Cemetery (Trinidad) (Lopinot and Ray 2018), and Savanne Suazey (Grenada) (Donop 2005), may have held a ceremonial/cosmological value for Indigenous Caribbean islanders (Waldron 2011).

Captivity entails intentional care and feeding, and is particularly significant for identifying ecological impact because contained animals are less likely to have exerted pressure on island ecologies. Agouti mandibles from Anse des Pères (Saint Martin), Cayon (Saint Kitts), and Hitchman's (Nevis) were shown to possess "abnormalities" that Wing (Nokkert 1999:118) argues results from captivity-driven inbreeding. No materials indicative of captivity, such as remains of enclosures or accumulations of coprolites indicating the concentration of fauna, have so far been identified (Giovas 2019; LeFebvre et al. 2019b). However, individual coprolites of an unidentified rodent species have been recovered from either Nevis (Hichmans) or Montserrat (Trants) (L. A. Newsom, pers. comm., 2021), highlighting the potential of such evidence for future research. Grouard (2007) suggests that the islands themselves would have served as natural enclosures.

Incorporating Ethnohistoric Evidence

Archaeologists have called for a multievidentiary approach to substantiate the commensal relationships between agouti and Indigenous islanders (Giovas et al. 2016; LeFebvre and deFrance 2018), although ethnohistoric texts have not always been included in such considerations. This is perhaps in part explained by language barriers and the difficulties ingrained within archaeologists' use of such sources (Lightfoot 1995; Stahl 1993; Wood 1990; Wylie 1985). In addition, ethnohistoric texts often present idealized or fictitious descriptions stemming from the biases of island colonization (Kullberg 2020). Despite their limitations, ethnohistoric texts have been extensively utilized in Caribbean studies on ecology (e.g., Lorvelec et al. 2007) and history of disease (Grunberg 2015) and may be usefully integrated within archaeological frameworks when used cautiously and with transparency. The difficulty in substantiating commensal relationships archaeologically in the Caribbean may particularly justify the use of ethnohistoric texts.

I identified nine French colonial sources explicitly discussing agouti in the context of Indigenous groups. Although I favor first publications, in some cases, I cite enhanced reprints carrying supplemental information. I analyzed sources as much as possible in the digitalized version of their original format (document scans) to minimize issues relating to transcription and translation. All French excerpts quoted in-text can be found in Appendix S1. Document scans originate from various online repositories, primarily Gallica[1], the website of the National French Library (BnF), and Manioc[2], which digitalizes records from the Caribbean, Amazonia, and the Guinian plateau. I searched sources using keywords and/or tables of contents as variations in grammar and font impede keyword searches in many pre-modern texts.

Here, I focus on the works of ethnographers who visited the islands in the

seventeenth century and whose works were written soon after[3]. From the eighteenth century onward, French ethnohistoric accounts of Indigenous islanders become increasingly derived from preceding texts. The islands referenced in reports are rarely specified and there is still uncertainty regarding which islands the authors would have visited (e.g., Roux 2011). Nonetheless, the vast majority of voyages appear to have taken place in the Lesser Antilles (Figure 2), where the descriptions of agouti commensal relationships are most likely to have originated.

Agouti Commensal Relationships in Ethnohistoric Texts

Agouti, A Valuable Resource

Agouti is consistently referenced in Indigenous Caribbean contexts (Figures 3, 4, and 5), particularly in regards to its widespread consumption and palatability (de Rochefort 1665a [1658]:37, 1665b:140; Du Tertre 1667 [1658]:297; Le Breton 1998 [1722]). Breton (1665:430) states that Indigenous islanders "use hardly any other terrestrial animals but this one [agouti]."

Agouti teeth are also referenced throughout ethnohistoric sources (Breton 1665;

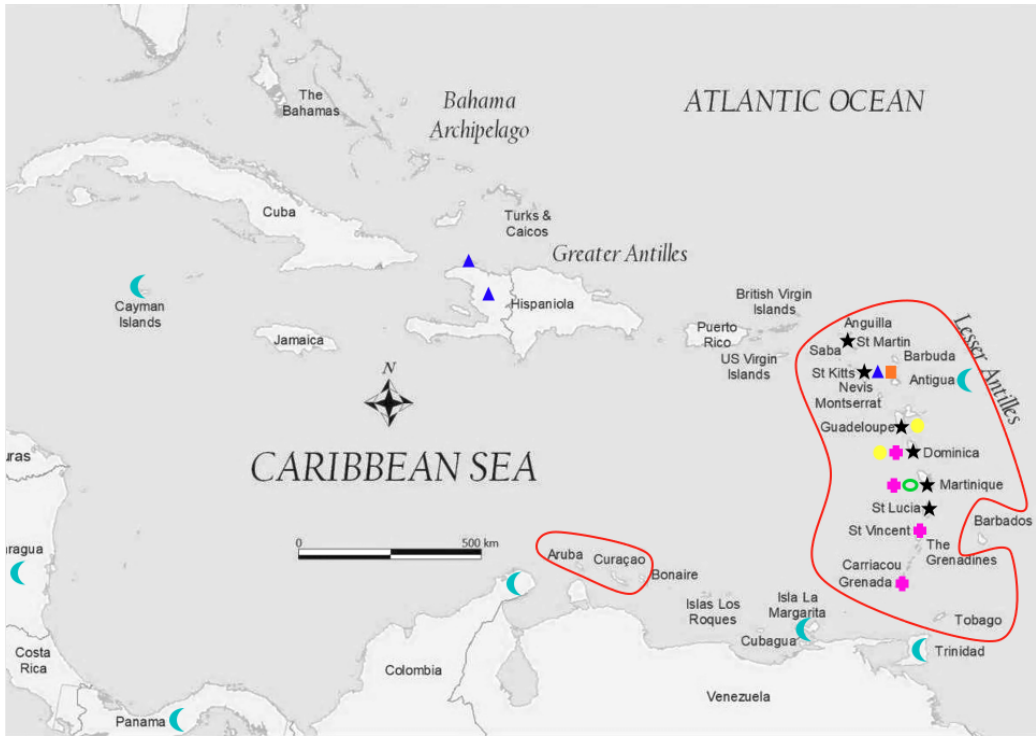

Figure 2. Map of the Caribbean showing non-native archaeological distribution of agouti (*Dasyprocta*) within the black boundaries (Rabinow and Giovas 2021) and confirmed voyages of the French ethnographers. Triangles: Charles de Rochefort- Saint Kitts, Tortuga, Haiti (Roux 2011), stars: Jean-Baptiste Du Tertre- Saint Martin, Saint Kitts, Guadeloupe, Dominica, Martinique, Saint Lucia, and Grenada (Kullberg 2020:22), square: Tronchoy- Saint Kitts, circle: Raymond Breton- Guadeloupe, Dominica (Roux 2011), crosses: Adrien Le Breton- Dominica, Martinique, Saint Vincent, Grenada (Roux 2011), ring: Labat- Martinique (Kullberg 2020:41). The Anonymous manuscript (1586) is thought to be based off the voyages of Sir Francis Drake (Klinkenborg 1996). Locations identified in the text included within map range are shown using crescents: Catman Islands, Antigua, Trinidad, Isla la Margarita, Cabo de la Vela (La Guajira peninsula, Colombia), Riohacha (La Guajira peninsula, Colombia), Panama, Nicaragua. Base map courtesy of Christina Giovas.

Figure 3. "*Agouti. Bête dangereuse habitant les bois*" (Agouti. Dangerous animal living in the woods) in Anonymous (1586). The caption may have been inverted with that for armadillo, placed above: "*Tatou. Cet animal se chasse comme le lapin. Il vit de racines et est fort bon à manger*" (Armadillo. This animal is hunted like rabbit. It lives off roots and is very good to eat).

Figure 4. Engraving of agouti (*Dasyprocta* sp.) in de Rochefort (1658:125).

de Rochefort 1665a [1658], 1665b; Du Tertre 1667 [1658]; du Tronchoy 1709; Le Breton 1998 [1722]; Rennard 1929). Charles de Rochefort (1665a [1658]:37), a protestant minister, notes that agouti teeth are "so sharp, that the Indians use them instead of lancets and razors." Indeed, rodents' incisors are sharpened through occlusion throughout

Figure 5. "*Agouti, espèce de lièvre*" (Agouti, a type of hare) in Labat (1742 [1722]:19)

the animal's life, continuously exposing hard enamel. Within ethnohistoric texts, agouti teeth are referenced in regards to adornment (de Rochefort 1665b:445; Rennard 1929:55); ceremony (Breton 1665:101; de Rochefort 1665b:519, 523, 551; Du Tertre 1667 [1658]:297, 365, 373; du Tronchoy 1709:189; Rennard 1929:59, 61, 66), and medical treatment (Breton 1665:141).

Agouti Far from Settlements

Ethnohistoric sources explicitly distinguish two types of agoutis. The first live "far from settlements" (Du Tertre 1667 [1658]:296) and are apportioned non-anthropogenically modified landscapes. These agoutis subsist off tree roots and are only rarely plump (Du Tertre 1667 [1658]:296). Hunting, which is in itself associated with wild animals (Russell 2011:157), is often described in connection to agouti (Breton 1665:29, 166, 290, 430, Breton 1666:70, 307, 310; de Rochefort 1665a [1658]:37, 1665b:140; Rennard 1929:30), further substantiating the autonomy of agouti from human groups. Du Tertre (1667 [1658]:297) reveals: "[m]ost of the dogs who participate in this type of [agouti] hunting, lose their sight in little time, I think it comes from the scorching lianas and the small branches that slash their eyes while running." While Du Tertre's veterinary diagnosis is dubious, his account testifies to agoutis' presence in natural settings, likely the tropical or subtropical deciduous forests that characterize much of the Caribbean's wet life zones (Newsom and Wing 2004:21). Other non-anthropogenically modified settings to which agouti are linked include hollow trees (Breton 1665:430; de Rochefort 1665a [1658]:37, 1665b:140; Du Tertre 1667 [1658]:296, 297; Labat 1742 [1722]:4, 393; Le Breton 1998 [1722]), open country, and short grass savannahs (Labat 1722:391–392).

Agouti in Proximity to Settlements

The second type of agouti is closely linked to human settlements. Du Tertre (1667 [1658]:296) describes the diet of

these agouti as consisting of "fruits, manioc, and potatoes." These agoutis are also "plumper and better tasting" than the agoutis living far from settlements (Du Tertre 1667 [1658]:296). The Dominican Jean-Baptiste Labat (1722:393) corroborates a similar diet consisting of "fruits, roots, leaves, potatoes, and manioc." However, correspondences between these two authors are to be expected since sections of Labat's work derive from Du Tertre's (Kullberg 2020:41).

Both manioc (*Manihot esculenta*), also known as cassava, and sweet potatoes (*Ipomoea batatas*) were introduced to the Caribbean from South America in pre-Contact times (Mickleburgh and Pagán-Jiménez 2012; Newsom and Wing 2004:3; Pagán-Jiménez 2007) and became widely cultivated after European arrival (Newsom and Wing 2004:201; Pagán-Jiménez 2013: 401). Breton (1665:282, see also 149, 261) specifically notes the cultivation of these species in Indigenous gardens: "they have gardens that they use as fields and plantations of vines, from which they draw their bread and their wine, their manioc and their potatoes."

The Dominican Raymond Breton (1665:302) specifies: "manioc does not cause harm to those who are used to it like rats and agouti," further verifying the consumption of these crops by agouti. It is unclear which varieties of manioc were cultivated, although all types contain varying concentrations of cyanogenic glucosides, toxic to many mammals when unprocessed[4] (Cock 1985). Agoutis may have developed the capacity to detect and avoid the most toxic varieties, such as has been proposed for small mammals with *Cucurbita* (Kistler et al. 2015). Anecdotal ethnographic evidence from Amazonia suggests that agouti would have favored low-cyanogenic potential (CNP) over high-CNP cultivars (Wilson 2003; Wilson and Dufour 2002).

Labat (1722:392) further substantiates agouti interaction with human crops:

> When he [agouti] has the misfortune of being in the cut canes, he soon gets tired, and can be taken or killed easily, because he sinks with every jump he makes in the straws that are often more than a foot thick, and where he has plenty of difficulty to pull himself out from because his legs are quite short.

This hunting account appears to have taken place in a sugar cane field, a colonial import from Southeast Asia.

Agouti Taming

Ethnohistoric sources indicate that agoutis were sometimes subject to taming, "an alteration in the human–animal relationship…that does not have lasting effects through succeeding generations" (Russell 2011:209). Taming is intrinsically tied to pet-keeping (Russell 2011:266) or the Caribbean equivalent, *iégue* (Norton 2015), whereby an animal is fed comparably to a human child (Breton 1665:290, 296). Du Tertre (1667 [1658]:296) describes agouti as being trained to walk on its hind legs and to use its front legs to grasp the meat with which it was presented. De Rochefort (1665b:140, see also 1665a [1658]:37) offers further credibility to Du Tertre's claim: "if it [agouti] is taken young, it is tamed easily." While de Rochefort has long been accused of plagiarizing sections from Du Tertre's work (Kullberg 2020; Roux 2011), his book "*Histoire Naturelle*" is not a complete appropriation. The sections regarding agouti differ sufficiently between the two sources, suggesting they were conceived and written independently. Du Tertre himself testified that the sections regarding animals did not intersect with his own work (Kullberg 2020:44). The Jesuit missionary Adrien Le Breton (1998 [1722]) also mentions the facility of taming agouti.

Breton's Caribbean accounts imply an equivalence between human children and young (non-human) animals. For example, Breton (1665:296) links the translations of

the phrases "animal that is fed" to that of "my infant, my child." Language synonymities between human children and animals occur twice more in Breton: "bait my child, my animal" (1665:168) and "I have an animal, an infant" (1665:296). Breton (1665:341) also links animals to divinities:

> Animals or birds who sometimes accidentally perch on their [Indigenous groups'] huts, or near, as if they were tamed, that they do not dare touch, saying these are birds who belong to the Gods of the boyez, and if they killed them, these Gods would make them die.

Gautier du Tronchoy (1709:90), a naval officer, describes a cult-like veneration for agouti, undertaken by only "the most spiritual" of Dominica.

Captivity

References to physical restraints for fauna include the translation for "cage" (de Rochefort 1655a [1658]:578) and the mention of rope nooses (e.g., Breton 1665:127, 219), notably for capturing lizards (Bouton 1640:77; Breton 1665:255; de Rochefort 1655a [1658]:145–146). However, no restraints are mentioned in connection to agouti. Breton's (1665:290, 296) *François-Caraïbe* dictionary offers translations for phrases such as "animal that I feed," "animal that is fed [by people]," and "I feed one," listing roosters, birds, dogs, and chickens as animals of service fed by Caribbean peoples. These translations hint at a certain commonality in hands-on management of fauna by Indigenous groups. Although roosters and chickens were products of colonial contact, "birds" may refer to a number of native or translocated species (e.g., Olson 1974) and dogs are known pre-Contact translocates from South America (Newsom and Wing 2004), implying potential for the direct feeding of commensal fauna pre-Contact. However, mentions of intentional feeding are never directly associated with agouti.

Discussion

Ethnohistoric texts suggest agouti shared a broad variety of commensal relationships with Indigenous islanders in the colonial Lesser Antilles. This evidence is suitable for substantiating pre-Contact agouti commensal relationships through analogy. The considerable landscape degradation, introduction of "Old World" fauna (e.g., chickens and pigs), and Indigenous population decline brought on by Europeans during the colonial period (Fitzpatrick and Keegan 2007) are likely to have impacted agouti's commensal relationships with Indigenous groups so that, overall, their significance may be understated by ethnohistoric texts.

The agouti's significance as a staple food for Indigenous groups transpires across all the ethnohistoric accounts, whether through descriptions of consumption or palatability. The hunting accounts appear primarily linked to subsistence as opposed to intentional capture for taming (Norton 2015). Agouti skeletal remains are typically found in midden contexts and frequently exhibit burning and/or butchery marks (Delsol and Grouard 2016; Grouard 2010), suggesting that agouti, in some cases, served a dietary purpose. Du Tertre (1667 [1658]:296), comparing the taste of agouti far from settlements from those in proximity to settlements, implies that agouti procured from different habitats would have been consumed.

Agouti occurred in non-anthropogenically modified forest and savannah landscapes, entirely distinct from human populations. Agouti were also present in much greater proximity to human settlements, feeding off Indigenous introduced species, such as potato and manioc, and hunted in sugarcane crops. Proximity to crops is also recommended by behavior (Emmons and Feer 1997). While manioc did not become a staple crop until colonial times (Mickleburgh and Pagán-Jiménez 2012; Pagán-Jiménez 2013) and sugarcane was a colonial import, species cultivation and the general management of landscapes

was established in the Caribbean early during pre-Contact times (Burney and Burney 1994) and greatly expanded during the Ceramic age (Fitzpatrick and Keegan 2007). This evidence is consistent with the potential for the exploitation of pre-Contact agouti through garden hunting or a similar management strategy that would have ensured both a supply of animal protein and mitigated crop damage.

Today, agoutis still serve as a fundamental prey for garden hunting (Cummins et al. 2015:1, 20; Naughton-Treves 2002). In the Amazonian Tambopata Province, agoutis comprised 52% of the total number of animals killed and 14% of game meat captured despite the low meat return (Naughton-Treves 2002). In assessments of damage caused by wildlife on subsistence crops in Peru and Bolivia (Naughton-Treves 2002; Pérez and Pacheco 2006), agoutis were the most frequent wildlife species to visit crop fields, described by local farmers as the "worst pest" (Naughton-Treves 2002:498). However, although harmful to crops, agoutis were never responsible for total crop loss (Naughton-Treves 2002). Singh et al. (2013) recently proposed a commercial model reminiscent of garden hunting, whereby agouti, feeding off non-marketable produce, may be integrated to Neo-tropical agricultural crops.

Many of the ethnohistoric accounts raise significant parallels with South American ontologies of non-human animals being integrated as children within human households (Cormier 2003; Fausto 2007; Viveiros de Castro 1998, 2002, 2005). For example, François Barbé-Marbois (1835:155) describes his experience with the Galibis of Guyana at the end of the eighteenth century: "I once saw an Indian [woman] nursing two small dogs... they fed in the same way young sapajous, agouti...." Breton's accounts (1665:168, 296), which present the same translations for young animals to human children, recall these practices. Although Breton's accounts cannot be directly linked to agouti, the recurring descriptions of agouti taming (de Rochefort 1665b:140; Le Breton 1998 [1722]) evokes its integration as *iégue* within human households and suggests privileged treatment. Young agoutis, more amenable to human interaction (Russell 2011:267), seem to have been favored for taming and are still preferred for contemporary agouti pet-keeping (Brown-Uddenberg et al. 2004:9; National Research Council 1991:200); care manuals and websites have been developed for public use (e.g., Juan 2020). The agouti burial on Sugar Factory Pier on Saint Kitts (Wing 1993:247) offers potential substantiation of agouti taming by Indigenous islanders. In the West Indies, these associated burials have primarily concerned dogs (Grouard 2013), with the Saint Kitts burial consisting of the single undisputed non-domesticate burial.

The association of certain animals to veneration and divinities (Breton 1665:341; du Tronchoy 1709:189—the latter's descriptions are specifically linked to agouti) again recalls parallels with South American ontologies, suggesting agouti may have perhaps been accorded ceremonial/cosmological value, as recognized for certain common prey animals in South America (Viveiros de Castro 1998). The agouti zoomorphs (Bonnissent 2008:585; Donop 2005; Lopinot and Ray 2018) and repeated mention of agouti teeth in ceremonial context recommends ceremonial/cosmological value for agouti skeletal remains. Despite their mention in the texts, no culturally modified agouti teeth have been reported so far archaeologically, although non-dietary cultural modifications (e.g., scoring, polishing, cut marks, drilling, etc.) on other agouti skeletal elements have been identified (Delpuech et al. 2000:30; de Waal 2006:377; Giovas 2019; Grouard 2007; Rabinow and Giovas 2021).

The mention of restraints coupled with the evidence of feeding support the captivity of certain fauna, although this practice may have been secondary to the comprehensive management of landscapes (Erickson

2006, 2008; Heckenberger et al. 2003). The lack of permanent freshwater sources on many islands may have limited the suitability of captive management. Captivity for agoutis seems particularly superfluous since enclosures may have been rapidly rendered ineffective from the rodents' chewing (Ranjeeta Lall et al. 2020); they appear to have maintained proximity to human crops and settlements without the need for restraints. Casual opportunistic management would likely have provided equal compensation as captive management for less effort; Borroto-Paéz and Woods (2012) note that a farmer raising and feeding 20 captive agoutis eventually chose to release these due to cost and tedium.

Proximity between agouti and Indigenous groups, as has been shown to occur, encourages the potential for these rodents to have acted as reservoirs for pathologies (Wiscovitch-Russo et al. 2020), such as parasites and viral and bacterial infections (Brown-Uddenberg et al. 2004:26–30; Jones 2021; Jones and Garcia 2017). For example, the "agouti louse" (likely *Trombicula* sp.), the "scourge…of all of the terrestrial creatures" (Barbé-Marbois 1835:198), is commonly described in early modern accounts from South America (e.g., Mury 1895) and may have affected Indigenous groups interacting with agouti.

Conclusion and Future Directions

The purpose of this paper was to bring attention to the potential of ethnohistoric sources to concretize the commensal relationships of agouti, a prominent Caribbean translocate. Evidence synthesized from nine French colonial sources substantiates the diversity and complexity of these relationships and contributes evidence towards long-standing questions regarding pre-Contact Caribbean agouti.

Ethnohistoric evidence testifies to the likelihood that agouti were managed through garden hunting as part of an integrative system, providing a valued source of animal protein. It is unlikely, however, that agouti would have been maintained in captivity, perhaps due to lack of necessity for or impracticability of implementing restraints. Evidence also brings to light non-dietary perspectives on agouti commensal relationships, offering potential for it having been tamed/kept as *iégue* and held ceremonial/cosmological significance. Integrative testing, notably zooarchaeological, morphometric, isotopic, and ancient DNA (aDNA) (LeFebvre and deFrance 2018) may allow for further refining of agouti pre-Contact Caribbean commensal relationships.

Commensal relationships are significant to improve understanding of pre-Contact Caribbean lifeways, including food organization and production, companionship, and disease/health. Additionally, commensal relationships possess substantive value for clarifying anthropogenic impacts on island ecosystems. Here, the agouti appears to have occurred largely unchecked, roaming through crops, forests, and human settlements, implying high impact on island ecosystems.

Overall, ethnohistoric sources present a valuable resource for advancing pre-Contact Caribbean studies. Colonial sources of different cultural backgrounds may provide valuable comparative perspectives. Although the evidence presented here focuses on agouti, the use of ethnohistoric accounts may be expanded to other species.

Notes

[1] https://gallica.bnf.fr

[2] http://manioc.org/

[3] Raymond Breton's '*Relatio Gestorum a primis ordinis Prædicatorum missionariis in insulis Americanis ditionis Gallicæ, præsertim apud Indos indigenas quos Caraïbes vulgo dicunt, ab anno MDCXXXV ad MDCXLIII*' was originally written in Latin in 1647 but remained unpublished until the twentieth century. I use the partial corpus published by Joseph Rennard in 1929 (*Les Caraïbes: La Guadeloupe 1635–1656*). Adrien le Breton's *De insulis Karaybicis relationes manuscriptæ*, originally completed in 1722, was never published but served as a basis for the anonymous manuscript *Description de l'isle de Saint-Vincent*. Unfortunately, *Description* has not yet been digitalized. I rely on an English transcription, published in 1998.

[4]Although it is unclear which manioc varieties were cultivated, there is evidence for certain varieties having held hazardous cyanogenic potential. Breton (1665:302) describes the effects of manioc water on humans and animals: "they die when they drink it, like have seen it multiple times, even in the person of two men and a woman." Breton (1665:302) adds, "I have seen cows die from it." High-cyanogenic potential manioc is a favored cultivar in certain regions of Amazonia (Wilson 2003).

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